Lower San Joaquin River Committee



Michael Johnson LSJRC Manager September 20, 2013

Current Status and Problem

- 2004 Salt and Boron Basin Plan Amendments and TMDL
 - Meet salinity water quality at Vernalis to protect agricultural beneficial uses in the Delta

Season	EC* (umhos/cm)	Boron** (mg/L)
Irrigation	700	0.8
Non-irrigation	1,000	1.0
Critical Year		1.3

^{* = 30-}day running average

 Develop salt and boron objectives for the SJR upstream of Vernalis

^{** =} monthly mean

Approach

- Initially: Central Valley Water Board staff effort
- 2010: Moved under the umbrella of CV-SALTS
 - Provide consistency for salinity activities in Central Valley
 - Formed Lower San Joaquin River Committee (LSJRC)
 - Stakeholder lead effort



LSJRC

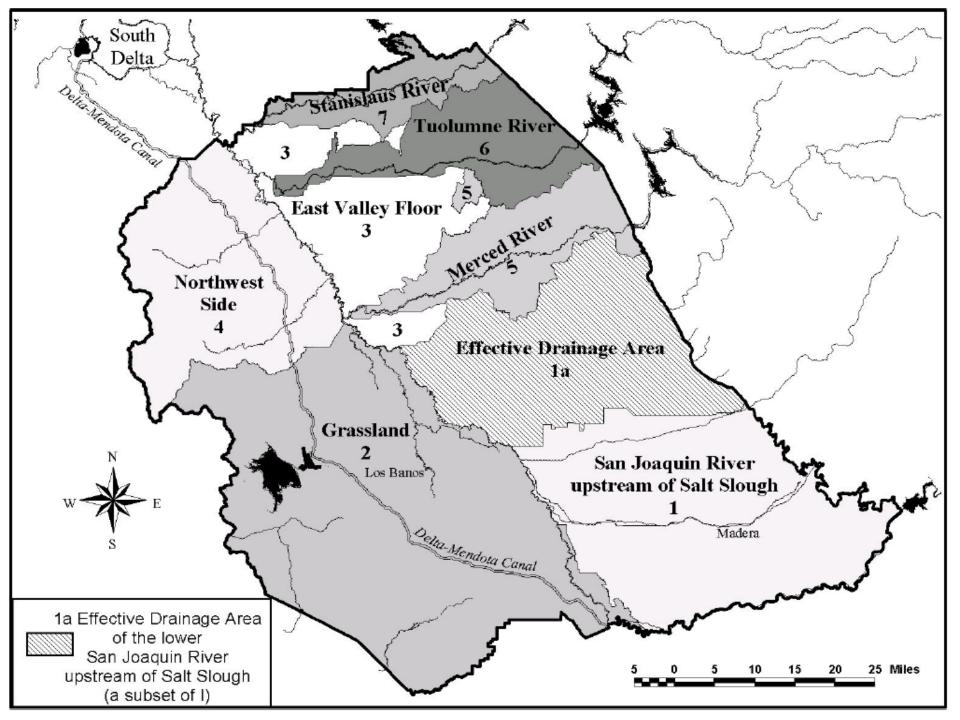
- Stakeholder based
 - Open membership
 - Anyone can join at any time
- LSJRC manager
- Technical contractor
 - Larry Walker Associates, Davis
- Monthly meetings in Modesto
- Should finish work in 2015



LSJRC Goals

Basin Plan Amendment—Salt/B water quality objectives

- Maximum protection of beneficial uses
- Maintain capability to increase level of beneficial use
- Develop a comprehensive plan to achieve salt balance
- Establish water quality objectives and implementation mechanisms to protect beneficial uses of the LSJR and downstream
- Develop objectives and implementation based on sound science
- Identify feasible plans for funding implementation alternatives
- Develop broad public understanding and ownership of the salt management plan
- Provide regulatory certainty to encourage capital investment and long-range planning
- Use common language, understanding and decision tools



Getting Your Basin Plan Amendment Approved BASIN PLANNING PROCESS Regional Water Quality Control Board ADMINISTRATIVE RECORD ACTION CONSULTATION Establish the Need for 303(d) Listing, Problem statement, etc. the Amendment Data References Research Public Notice * Mailing List * Project Description* Public and Hold CEQA Scoping Meeting Alternatives * Agency Review CEQA Checklist* Exhibits * Comments* Develop Draft Amendment SWRCB Review* Draft Staff Report (References) and Draft Staff Report Draft Amendment Peer Review Correspondence* Obtain Scientific Scientific Pe-er Review Comments* Peer Review Peer Review * Response to Peer Review Comments Revise Staff Report (References) Flevised Amendment **Hevise Amendment** Draft Resolution and Staff Report. Draft Certificate of Fee Exemption* Notice of Hearing Notice of Filing Public and Notice Hearing Mailing List Agency Review Proof of Publication Public Comments Response to Comments Hold Adoption Hearing and Finalize Amendment Agenda Agenda Item and Staff Report Exhibits and Presentations * If needed Signed Resolution Final Amendment Transmit 2 copies of indexed, Final Staff Report paginated administrative Transcript or Recording record to SWRCB Regulatory Regulatory Non-regulatory Groundwater Surface Amendment Amendment Amendment APPROVAL APPROVAL APPROVAL STATE WATER RESOURCES CONTROL BOARD APPROVAL APPROVAL APPROVAL OFFICE OF ADMINISTRATIVE LAW APPROVAL **INFORMATION** U.S. ENVIRONMENTAL PROTECTION AGENCY

Tasks

- Technical Tasks LWA
 - Review Beneficial Uses of water in SJR
 - Water quality criteria review
 - Documents developed by CV SALTS (MUN, AGR, Aquatic Life, Stock Watering)
 - Identify potential range of Water Quality Objectives
 - Conduct water quality and salt loading characterization
 - Compile and update water quality data
 - Update 2004 staff report analysis of baseline salt loading
 - Conduct analysis of existing water quality and compliance with possible Water Quality Objectives

Tasks

- Conduct implementation planning
 - Identify implementation alternatives
 - Develop methods to screen alternatives
 - Select alternatives for detailed analysis
 - Conduct detailed analysis
 - Propose alternative for implementation
 - Develop and define the program of implementation



Implementation Alternatives

TMDL Approach (similar to current Vernalis Approach)

- Waste load allocations for point source discharges are concentration based
 - Equal to the existing salinity water quality objectives for the LSJR at the Airport Way Bridge near Vernalis.
- Fixed load allocations for nonpoint source dischargers
- Fixed base load allocations designed to protect water quality during low flow conditions.
 - Implementation is by subarea
- Limiting discharges through fixed load allocations, however, could result in a **net salt build-up in the LSJR** watershed because salts would continue to be imported to the watershed in supply water but salt exports would be significantly restricted.

Implementation Alternatives

Real-Time Management

- Develop opportunity for dischargers to use real-time allocations to maximize salt exports while still meeting water quality objectives. Real-time load allocations are formulaic, based on actual real-time flow and water quality conditions.
- Dischargers participating in a Regional Board approved real-time management program would be allowed to use real-time load allocations in lieu of the fixed base load allocations.

Tasks

- Economic analysis
- Develop long-term monitoring program
- Prepare Substitute Environmental Documentation



Summary

- Surface water focus on salt and boron
- Stakeholder driven process
- Technical work initiated within last month
- Explore implementation options including real-time management
- Will complete work sometime in early 2015
- Work product is a Basin Plan Amendment
 - Salt and boron water quality objectives in LSJR and an implementation program



